

Amendments to the Claims:

This following listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (canceled)
2. (currently amended) A power steering pump in accordance with claim [11] 17 wherein ~~[[the]]~~ said flow control valve slides axially to vary the size ~~[[to the]]~~ of said inlet and to regulate fluid flow into ~~[[the]]~~ said fluid bypass port.
3. - 13. (canceled)
14. (currently amended) The power steering pump of claim ~~[[13]]~~ 17 further comprising pumping elements disposed within ~~[[the]]~~ said housing, said pumping elements comprising a cam chamber and a rotor having retractable vanes disposed within ~~[[the]]~~ said cam chamber.
15. (canceled)
16. (currently amended) A power steering pump in accordance with claim ~~[[12]]~~ 17 wherein the electromagnetic field urges ~~[[the]]~~ said flow control valve to close ~~[[the]]~~ said inlet of ~~[[the]]~~ said bypass port, and ~~[[the]]~~ said spring urges ~~[[the]]~~ said flow control valve to open ~~[[the]]~~ said inlet of ~~[[the]]~~ said bypass port.
17. (new) A power steering pump comprising:
a housing, which includes a bore having an axis, a fluid discharge port communicating with said bore at a first axial location, a fluid bypass port communicating with said bore at a second axial location with an inlet through which fluid enters said bypass port from said bore, and a fluid outlet passage at a first end of said bore communicating with said fluid discharge port and said bore;

a cylindrical flow control valve located at a second end of said bore, having first and second ends with said first end extending into said bore and said valve being axially displaceable along said axis from a first location in which said bypass port inlet is in an unobstructed open condition and into other locations within a defined range which cause a corresponding degree of interruption of fluid flow into said bypass port inlet, including a fully obstructed closed condition;

a plunger element rigidly secured to said second end of said flow control valve and being axially displaceable with said valve along said axis in response to forces being applied thereto; a coil spring surrounding a portion of said flow control valve, said spring being seated between said housing at said second end of said bore and said plunger to provide a bias force against said plunger to place said flow control valve in said first location in the absence of other opposing forces; and

an electromagnetic coil mounted to said housing and surrounding said plunger element for generating an electromagnetic field that applies electromagnetic forces to move said plunger and said flow control valve along said axis against the bias forces of said spring to locations within said range; and

wherein said flow control valve and said plunger element each have a continuous open fluid passage coaxially located in each to extend from said first end of said valve and through said plunger element to be in communication with fluid in said bore.

18. (new) A power steering pump comprising:

a housing including a bore having an axis, a fluid discharge port communicating with said bore at a first axial location, a fluid bypass port communicating with said bore at a second axial location and including an inlet at said bypass port through which fluid enters said bypass port from said bore, and a fluid outlet passage communicating with said fluid discharge port and said bore;

a flow control valve located in said bore and being axially displaceable along said axis in a range of locations to cause said inlet to be fully open, partially open and fully closed for proportioned fluid bypass control;

an electromagnetic coil for producing an electromagnetic field;

a plunger for moving said flow control valve along said axis at said inlet, said

plunger being rigidly secured to said flow control valve and axially displaceable along said axis in response to said electromagnetic field;

a spring including a first end and a second end axially opposite said first end, having said first end seated against axial displacement relative to said housing and said second end seated against said plunger, and disposed to surround a portion of said flow control valve to provide a biasing force against said plunger that causes said inlet to remain in a fully open condition when no electromagnetic field is generated;

wherein said flow control valve and said plunger element each have a continuous open fluid passage coaxially located in each to extend through both said valve and said plunger element to be in communication with fluid in said bore.